

ABSTRACT

Systems and methods, consistent with the present invention, provide a high-speed line interface for networking devices. Such an interface may be used in networking devices, such as routers and switches, for receiving data from, and transmitting data to, high-speed links, such as those lines carrying data at rates of 2.5 Gbit/sec, 10 Gbit/sec, and 40 Gbit/sec and more. In a preferred embodiment, the interface deserializes data from an incoming data stream onto a multi-line bus so that the data may be processed at a lower clock speed. Packets are extracted from the data on the multi-line bus and distributed among a plurality of switching/forwarding modules for processing.